

Notice of Allowability

Application No.

10/044,131

Examiner

Raymond S. Dean

Applicant(s)

FRANZEN ET AL

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to May 17, 2005.
2. ☒ The allowed claim(s) is/are 1 - 3, 5, 7, and 9 - 24.
3. ☒ The drawings filed on 11 January 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Christopher Harris (Reg. No. 43660) on July 6, 2005.

The application has been amended as follows: **In Claim 1, line 11, the period (“.”) at the end of the word “beams” has been replaced with --, said payload architecture being operative to select any of the plurality of first spot beams to contain a gateway. --. In Claim 3, lines 2 – 3, the phrase “said payload architecture being operative to select any of the plurality of primary beams to contain a gateway” has been replaced with – a period (“.”) --.**

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance:

Regarding Claim 1, Sarraf (US 6,175,719) teaches a multi-beam satellite comprising: an input section to receive a plurality of first spot beams via a plurality of uplink antennas; an output section to transmit a plurality of second spot beams via a plurality of downlink antennas (Figure 1, Figure 2, Column 3 lines 11 – 15, lines 33 –

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38), and a payload architecture coupled between said input section and said output section (Figure 2), said payload architecture flexibly and selectively switching and filtering signals from said plurality of first spot beams received by said input section and routing the signals to said output section to be transmitted as said plurality of second spot beams (Column 3 lines 6 – 56).

Sarraf does not teach power dividing signals.

Adams (US 6,442,148) teaches power dividing signals (Figure 1, Column 6 lines 18 – 24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the power dividing circuitry taught by Adams in the input switch matrix of Sarraf for the purpose of providing a plurality of frequency bands for processing as taught by Adams.

Sarraf in view of Adams does not teach each of the plurality of uplink antennas being repositionable to receive a test signal transmitted from a single earth station and each of the plurality of downlink antennas being repositionable to retransmit the test signal to the single earth station.

Norin (US 6,233,433) teaches an uplink antenna repositionable to receive a test signal transmitted from a single earth station and each of the plurality of downlink antennas being repositionable to retransmit the test signal to the single earth station (Figure 4, Column 4 lines 14 – 65, Examiner respectfully disagrees with Attorney for Applicants assertion that Norin does not teach or suggest an uplink antenna that is repositionable to receive a test signal transmitted from a single earth station. The uplink

antenna (12) and the downlink antennas (28a – 28d) are connected to the satellite thus as the satellite moves or is repositioned so will said antennas be moved or repositioned, applying the broadest reasonable interpretation to this limitation Norin reads on said limitation).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the testing method taught in Norin in the satellite system of Sarraf in view of Adams for the purpose of verifying the operation of the satellite subsystems as taught by Norin.

The prior art of record, however, fails to teach or show said payload architecture being operative to select any of the plurality of first spot beams to contain a gateway. Claims 2, 18, and 20 depend on Claim 1, Claims 3, 5, and 22 depend on Claim 2, Claim 19 depends on Claim 18, and Claim 21 depends on Claim 20 therefore examiner gives same reason as set forth above.

Regarding Claim 7, The prior art of record fails to teach or show wherein said payload architecture selectively switches said plurality of first spot beams to allow any uplink signal to act as a gateway signal for purposes of testing. Claims 9 – 10, 12, and 23 – 24 depend on Claim 7, Claim 11 depends on Claim 9, and Claim 13 depends on Claim 12 therefore examiner gives same reason as set forth above.

Regarding Claim 14, The prior art of record fails to teach or show wherein any one of said plurality of first spot beams can act as a gateway for the purposes of testing said first spot beam and said second spot beam. Claim 15 depends on Claim 14,

Claims 16 – 17 depend on Claim 15 therefore examiner gives same reason as set forth above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S. Dean whose telephone number is 571-272-7877. The examiner can normally be reached on 7:00-3:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A. Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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On July 15, 2005, the Central FAX Number will change to **571-273-8300**. This new Central FAX Number is the result of relocating the Central FAX server to the Office's Alexandria, Virginia campus. Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number. To give customers time to adjust to the new Central FAX Number, faxes sent to the old number (703-872-9306) will be routed to the new number until September 15, 2005. After September 15, 2005, the old number will no longer be in service and **571-273-8300** will be the only facsimile number recognized for "centralized delivery".

CENTRALIZED DELIVERY POLICY: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies. For example, if the examiner has rejected claims in a regular U.S. patent application, and the reply to the examiner's Office action is desired to be transmitted by facsimile rather than mailed, the reply must be sent to the Central FAX Number.



Raymond S. Dean
July 6, 2005



NAY MAUNG
SUPERVISORY PATENT EXAMINER